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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,603	07/11/2003	Jean-Marie R. Dautelle	RTN-170AUS	2952

33164 7590 04/07/2006

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EXAMINER	
NGUYEN, TANH Q	

ART UNIT	PAPER NUMBER
2182	

DATE MAILED: 04/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/617,603	DAUTELLE, JEAN-MARIE R.	
	Examiner	Art Unit	
	Tanh Q. Nguyen	2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02/06/06 (RCE)*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 9, 2006 has been entered.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 23-36 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 23 recites "A computer program medium having computer readable code thereon for storing commands". Applicant discloses "a computer useable medium can include a readable memory device" and "The computer readable medium can also include a communications link,...having program code segments carried thereon as digital or analog signals". The claims do not fall into one of the four statutory categories (process, machine, manufacture, or composition of matter) because the disclosure suggests that the computer program medium includes signals.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 8-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trueblood (US 5,893,053) in view of Deniau et al. (US 2003/0222883 A1).

6. As per claims 1, 10, 23, 26, 37 and 40, Trueblood discloses a method and computer program for storing a command in an air traffic controller (ATC recording and playback system 10) having steps of recording a first set of commands (X-window protocol command, col. 4, ll. 19-22) to a command queue (storage device 24, col. 5, ll. 1-7 and 29-41) to provide a first dynamic snapshot (X-lib, col. 6, ll. 9-17) in a first system state (tracking client), storing the first snapshot at a first time (col. 6, ll. 18-25), recording and storing additional sets of commands to the command queue wherein the commands are spaced in time from storing the first set of commands (repeating the process for each command, see col. 5, 29-45), and storing the second snapshot at a second time (see Figs. 2-3 and7C).

Trueblood discloses a system (Fig. 3) for storing commands including a recording proxy 58 intercepting the commands (X-window protocol) to be stored, a dynamic snapshot generator 64 for generating dynamic snapshots (X-lib) corresponding to the respective sets of commands and a command interface 46

coupled to the recording proxy 58 and a storage module 24 for storing the commands and snapshots.

Trueblood does not specifically teach eliminating selected ones of overriding, redundant and superfluous commands in the command queue.

Deniau teaches information regarding which graphical objects have been modified and instructions for generating a minimum number of drawing operations ([0049]) involving updating only objects that need to be updated ([0050]). Deniau further provides an example (FIG. 5; [0066]-[0069]) where only the area bounded by rectangle 540 is updated as a result of moving circle 520 from the right of rectangle area 540 to the left of rectangle area 540 - hence discloses eliminating selected ones of overriding, redundant and superfluous commands.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to update only objects that need to be updated by eliminating selected ones of overriding, redundant and superfluous commands, as is taught by Deniau, in order to store a minimum number of commands, thereby minimizing the storage requirements for additional snapshots and speeding up the storage of the additional snapshots - as only commands that need to be updated are stored.

7. As per claims 8-9, Trueblood discloses the commands including two-dimensional display commands (conventional for ATC) associated with graphical display (display device 14, col. 6, ll. 45-50). Deniau teaches commands associated with scene graph ([0021]) being used for two-dimensional graphic

applications [FIG. 5] in order to save computer resources ([0004]-[0011]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use commands associated with a scene graph, as is taught by Deniau, in order to save computer resources.

8. As per claims 11-13, Trueblood discloses the commands stored in a solid state memory of non-volatile memory (hard disk).

9. As per claims 14, 19, 30, 35, Trueblood discloses the steps of receiving a time of interest between first and second time (Figs. 4 and 8) playback function at start and halt time, see col. 9, ll. 9-26 and col. 10, ll. 10-60), retrieving the first dynamic snapshot (col. 10, ll. 21-30), retrieving additional commands recorded at or before the time of interest and appending the command to the first dynamic snap shot to provide an intermediate dynamic snapshot (window) and interpreting the command (col. 9, ll. 31-39) associated with the intermediate snapshot.

10. As per claims 15-18, 20-22, 24-25, 27-29, 31-34, 36, 38-39, the claims generally correspond to claims 8-13 and are rejected accordingly.

11. As per claims 41-43, Trueblood discloses the dynamic snapshots generator 64 including command queue 68 having command stack portion for recording the commands (col. 6, ll. 9-17), snapshot portion 70 for recording the commands associated with the system state, and a processor 34 to combine the commands in the command queue to eliminate one of overriding, redundant and superfluous commands in the queue. Deniau teaches a command queue having a command stack portion for recording commands of the first scene and a

dynamic snapshot for recording commands of a second scene, and further the commands in the first scene and the commands in the second scene being compared to eliminate selected ones of overriding, redundant, and superfluous commands (FIG. 4; [0052]-[0065]).

12. Claims 2-7 are rejected under 35 U.S.C. 103(a) as being obvious over Trueblood in view of Deniau et al., and further in view of Burt et al. (US 5,649,032).

Trueblood/Deniau does not disclose the first and second intervals to the various values as claimed. Since Burt discloses the mosaic display control system being constructed using various construction sequences (batch, recursive, hierarchical) each using different time base system (see Fig. 2A-C) and the construction of snapshot (coarse to fine image alignment process) being selectable based on user defined functions for desired resolution/pixel (col. 10, l. 23 to col. 12, l. 14), it would have been obvious to one having ordinary skill in the art to realize that the value of the first and second intervals of the system of Burt can be varied depending on the parameters selected by the users in order to best produce a seamless mosaic (col. 4, ll. 37-48).

Furthermore, it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art as a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the claimed container was significant.

Response to Arguments

13. Applicant's arguments with respect to claims 1-43 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanh Quang Nguyen whose telephone number is (571) 272-4154 and whose e-mail address is tanh.nguyen36@uspto.gov. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh, can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300 for After Final, Official, and Customer Services, or (571) 273-4154 for Draft to the Examiner (please label "PROPOSED" or "DRAFT").

Effective May 1, 2003 are new mailing address is:

Mail Stop ____
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P.O. Box 1450
Alexandria, VA 22313-1450

Effective December 1, 2003, hand-carried patent application related incoming correspondences would be to a centralized location.

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04/03/2006

TQN
April 3, 2006